Training Capabilities AoA

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1

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Training Capabilities Analysis of Alternatives (TC AoA) Update

MORSS – WG 22

21 June 2005

Fred Hartman

Director JAEC, OUSD(P&R)

Training Capabilities AoA

✓ **Background**

- **AoA Findings and Recommendations**

- **Way Ahead**

- **Discussion**

Background

- **Program Decision Memorandum 1, 12 Dec 02**

  – **Terminated JSIMS on 30 Sep 03 (Block 1)**

  – **Conduct an Analysis of Alternatives (AoA) beginning in FY03**

  – **Identify cost-effective methods for Joint & Service Training**

- **AoA Guidance signed by USD, Acquisition Technology & Logistics (AT&L) Jul 03.**

  – **Senior Steering Group (SSG) Co-Chaired by USD (P&R) and JFCOM**

  – **SSG included training stakeholders from OSD, Services, Joint Staff, and Intelligence Agencies**

  – **Final Report completed 30 Jul 04**

Joint Simulation System (JSIMS) Impact

Training Capabilities AoA

- **Directed by Program Decision Memorandum 1, 12 Dec 02**
  - **Revise program to complete Block 1 software (Sep 03)**
  - **Establish a software support facility (SSF) managed by JFCOM**
  - **Transfer all program software, licenses, integration hardware and documentation to the JFCOM SSF**
- **Final JSIMS testing conducted March 2004**
  - **JSIMS was not ready to support joint training exercises**
  - **Potential for reuse of concepts, functional federates, and common software components of JSIMS in other federations**
- **SSF has evolved to Joint Development & Integration Facility (JDIF)**
  - **USJFCOM using former JSIMS Integration Lab in Orlando, FL**
  - **Focused on supporting Joint Force Trainer federations**
  - **Continues to harvest JSIMS capabilities to support joint training federations**

Outline

- **Background**

✓ **AoA Findings and Recommendations**

- **Way Ahead**

- **Discussion**

Findings & Observations

- **Management & oversight more than technology has caused failure of previous joint training simulation efforts**

- **Current joint training has been largely based on training exercises supported by simulations**
  - **Not all training issues are cost effective for large scale simulation applications**
  - **Alternative training methodologies may provide more cost effective solutions for frequent training of COCOM and JTF staffs**

- **Intelligence must become part of training audience not just a training aid**

- **Not all Joint training issues were resolved within time and resources allotted to the AoA Team**
  - **Detailed programmatic details and implementing actions worked in Fall 04 Program/Budget process**

SSG Recommendations

- **Management Decisions**
  - **Joint Training Functional Capabilities Board**
  - **Joint Requirements Office (simulations) at JFCOM**
  - **Transition SSG Oversight to T2 Exec Steering Group**

- **Simulation Options**
  - **Constrained enhancements to Base Case for FY 06-11**

- **Re-engineering Training Options**
  - **Re-engineering Study with Prototyping in COCOMs**

- **Acquisition Prototype Options**
  - **Three year prototype led by SOCOM with JFCOM**

- **Include Intelligence as partner in future joint training**
  - **Working constructive simulation federation content Intel Community and JFCOM**

Outline

- **Background**

- **AoA Findings and Recommendations**

✓ **Way Ahead**

- **Discussion**

Management Way Ahead

Management Decisions

- **Joint Training Functional Capabilities Board (FCB)**
  - Tri-Chair by OSD (P&R), Joint Staff J7, and JFCOM
  - Focused on analyzing capabilities of existing and future programs, projects and initiatives, Live-Virtual-Constructive environment
  - Officially chartered in Sep 04 by JROC
- **Joint Requirements Office (simulations) functions at JFCOM**
  - Joint Training Requirements Group met in March 2005 validating and updating TC AoA Final Report training gaps and findings
  - Managing the development and integration of joint models and federations
  - Coordinating the Joint LVC JCD with JNTC JMO and FCB
- **Transition SSG Oversight to T2 Exec Steering Group**
  - Completed with briefing to 1 Oct 04 T2 ESG and regular updates provided T2 JIPT and SAG Meetings

Simulation Way Ahead

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Simulation Enhancements

- **Built a Joint Force Trainer M&S Toolkit that is supporting Joint National Training Capability and Joint Task Force Cdr and staff training, Functional Component Cdr and staff**
  - *Core of the constructive Toolkit are two federations using existing Joint, Service, and agency M&S applications federated in an HLA environment to meet Joint training needs.*

- **Supported JNTC Initial Operating Capability (horizontal, vertical and integrated), Mission Rehearsal Exercises for OIF/OEF, and planned support for MRXs and Joint training events on schedule for remainder FY05**
  - *Supporting:*
    - *Joint Operational Concepts*
    - *Major Combat Operations (MCO)*
    - *Stability Operations*
    - *Homeland Security (HLS)*
    - *Strategic Deterrence*

- **Partnership with U.S. Allies, NATO, PfP, and Government Agencies**

- **Adhering to DoD standards and architectures for flexible, scalable, efficient and deployable simulation(s), federation(s) or bridged federations to train multiple echelons simultaneously**

Re-engineering Training

- **Exercises supported by large simulations are not appropriate for some types of joint training**

- **Must include individual as well as collective training in Learning Continuum**

- **Recommended alternative training methodologies**
  - **"Lightweight" simulations / federations**
    - **Off the shelf (GOTS/COTS) products**
    - **Standard Scenario Generation software and data**
  - **Massively multi-player gaming applications**
    - **Best for small audience (<50) distributed seminar games**
    - **Pre-training for large exercise participants**
  - **Story driven training**
    - **Non-combat skill areas such as peacekeeping, crisis action**
  - **Unique functional federates (specialty models)**
  - **Instructor support tools**
    - **Integrate with light federations**
  - **Embedded training (C4ISR systems)**

Other AoA Actions

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- **Need Intelligence Community as full partner in Joint and Service training**
  - **USD(I) leading effort with JFCOM for Joint National Intelligence Training Federation (JNITF)**
  - **One stop access to Intel for training environments**
- **Related issues – highlighted but not solved in AoA**
  - **Multi-Level Security for training systems**
    - **Need Intel Community policy and procedures for training and operations**
  - **Full Global Information Grid (GIG) Integration to include Training Enterprise Services**
    - **Build distributed training enhancements now to be compatible with the GIG**
    - **Data issues are a large effort**

Post - AoA Status / Update

Training Capabilities AoA

- **Completed TC AoA Program / Budget negotiations**
  - **PDM II, Dec 04 provided offsets for Alternatives #4 and #5**
    - **Alt #4, Acquisition Prototype**
    - **Alt #5, Re-engineering Training**
  - **Commitment at JROC to begin funding of post-AoA activities for enhanced simulations, other training systems, and an acquisition prototype**
    - **Issue Paper also identified offsets for Alt #3, Simulations**

- **Implementing recommendations in AoA Final Report**
  - **Management actions in place**
  - **Blended Course of Action for future training enhancements for both simulations and other training system enhancements**
  - **Acquisition prototype scheduled for FY 06-08**
  - **Conducting studies in FY 05**

Questions & Discussion

Bounded Scope

Training Capabilities AoA

Strategic

Operational

Tactical
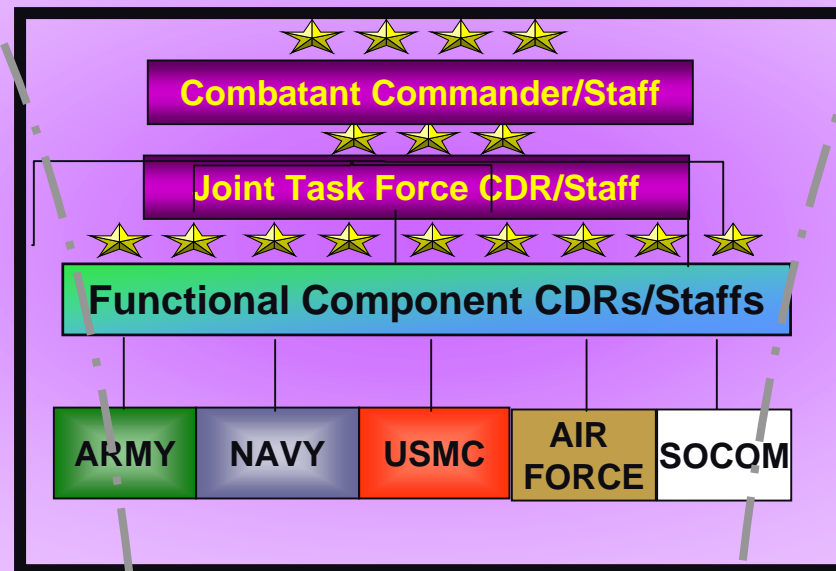
Combatant Commander/Staff	+1
Joint Task Force CDR/Staff	0
Functional Component CDRs/Staffs	-1
ARMY NAVY USMC AIR FORCE SOCOM	-2

INTEGRATION OF JOINT & COMBINED EFFECTS / SYSTEMS TO LOWEST LEVEL

16

Joint Training Continuum

Training Capabilities AoA

General   **Functional**

Education	*Familiarization* *Certification* **Execution**
Individual Training	Preperation ⟶ **Operations**
Collective Training	
Experience	*Integrated and disciplined preparation to defined performance standards* **Mission Rehearsal**
Staff Training	
Individual Learning	*Indoctrination* *Qualification* *Validation*

Time
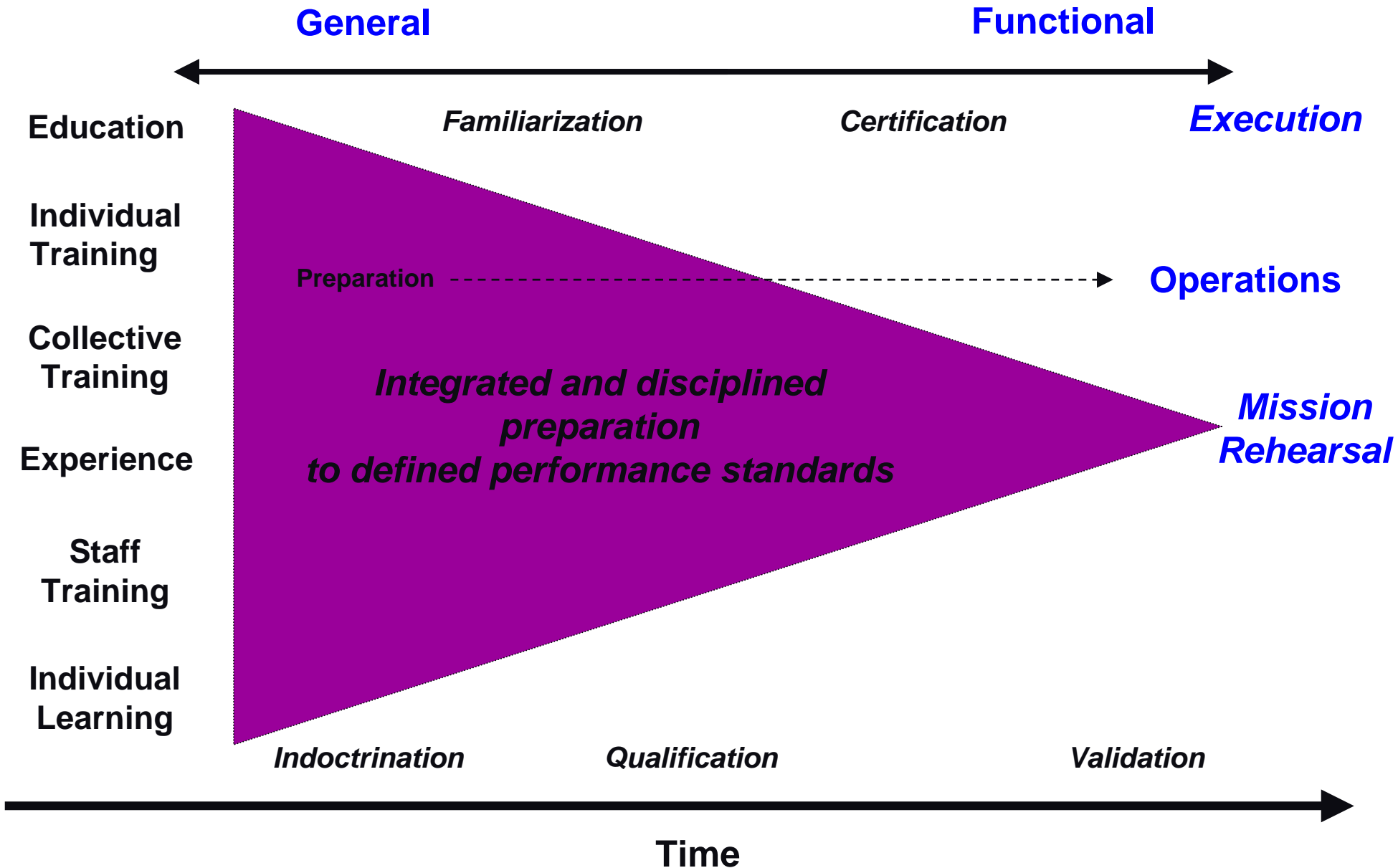
L-V-C Architecture

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Nellis AFB
- GIAC
- SNN

TENA Gateway

Live AF Forces

NAS FALLON
- Virtual EP-3
- SNN

C2TIG Hurlburt
- AWSIM
- GIAC
- SNN
- ATI

TACTRAGRUPAC
- JSAF
- SNN

JTASC TB 30
- JCATS Server
- JCATS Bridge
- JSAF
- GIAC Server
- HLA/DIS Gateway
- SIMPLE
- JQUAD

TACCSF Kirtland
- HLA Gateway
- SNN
- Virtuals: JSTARS,
- AFSERS

NTC FT Irwin
- JCATS Clients
- MUSE VUAV (4)
- HLA Gateway
- SIMPLE
- GIAC
- SNN
- ITM
- TENA Gtwy

FT Rucker
- Virtuals
- SNN

Live Army Forces

29 Palms MCGACC
- JCATS Clients
- JSAF
- SNN
- GIAC
- DVTE
- TENA Gtwy

Live MARFOR